## Questions from October 15, 2019 council meeting

- 35. The composite channel will greatly increase the amenity value of the project for the six blocks of the Rio de Flag north of the tracks. Why has there been so little attention to 30 blocks south of the tracks?
  - The RDF project will divert flows out of the Southside. The existing Rio de Flag channel in the Southside is not part of the scope as designed by the US Army Corps of Engineers. Improvements to the Rio south of the tracks in the Southside could be a future project if funding becomes available.
- 36.Engineering: Please describe US Army Corps of Engineers (ACE) policy regarding projects with BCR < 1. To your knowledge, how often has ACE led other projects with BCR < 1? Are you fully confident that ACE will not reverse course on their decision to lead this project?
  - The Benefit Cost Ratio is still a component of the RDF project and will be reported. The US Army Corps of Engineers funding has been proposed by General Semonite and the US Army Corps will continue to lead the project in accordance with the Project Cooperation Agreement. Staff has not completed the research of US Army Corps' project with a BCR < 1.
- 37. Capital Improvements: what estimated payments to BNSF are you using in your cost estimates of project costs? My understanding is that ACE cannot share the costs of bridges at least for road bridges. The shoo-fly is a bridge for a railroad. If the shoo-fly is part of the project, can the ACE pay 65% of the cost of the shoo-fly? The City is still working on this issue with BNSF to determine the cost to construct the RDF project across their ROW. The US Army Corps of Engineers has not commented on the cost, and if they will share the cost of a shoo-fly as outlined in the Project Cooperation Agreement. The railroad bridge is a flood control feature, not a sole City responsibility.
- 38. For the moment, let's ignore the BNSF demand for \$25 million for a shoo-fly (third rail) over the culvert where it crosses under the tracks. Even if that cost disappears, the City must pay BNSF to run the culvert and open channel on railroad land for about a mile. If BNSF were to demand \$5 million of \$50 million for allowing this disturbance to their property, does the City have to pay whatever BNSF demands? Does the City have any leverage in negotiating payments to BNSF?

  The cost allocations will be based on benefits delivered. The City is not certain that BNSF will require compensation for the right to install the underground box on their property. Continuance with agreements will define roles and responsibilities for work and cost.

- 39.If the ACE project is built, would there be public access to the half-mile of open channel on BNSF land?
  - The open channel in the lower reach is on BNSF and City property. The City cannot quarantee public access on BNSF property.
- 40.To what extent does the current project plan differ from the project (Alternative 6b) that the ACE approved in the Final Environmental Impact Statement (FEIS) of September 2000? Do you have any concerns about proceeding with a project that differs from the project approved in the FEIS, especially when the FEIS will be 20 years old by the time City Council is asked to commit to the project? The current plan and alternative 6B differ in, the upper reach, Bonito Rd. to Route 66, 6B proposed a soil and riprap channel with two blocks of a covered channel, the approved plan is an underground concrete box culvert with the composite channel on top. The City has had no indication from the US Army Corps of Engineers that the current scoped project is not approved or that there are any issues with the environmental process. The design is managed by the US Army Corps of Engineers and it is in final review.
- 41.On an ACE project, the local partner (City of Flagstaff) must pay 100% of the cost of bridges. In the mid-2000s, the ACE design included an open channel from Frances Short Pond to the railroad, but the City asked ACE to underground the Rio because the ACE plan required 7 new bridges (including 5 vehicle bridges and 2 pedestrian bridges) between Frances Short Pond to the railroad. Did the City ever consider building low-water crossings of the Rio that would cost a tiny fraction of bridges? (photos of 2 types of low-water crossings below. Basically, they allow vehicles and pedestrians to cross when the stream is dry or low flow, but to take another route during the few days per year when the water is deep)

The City is responsible for all bridge relocations but in no case for more than 35% of the total project cost. Elimination of the bridges was a result of the value engineering to use a concrete box culvert. The City has always felt that maintaining the Aspen, Beaver, Cherry, Dale and Bonito street crossings to be critical to community connectivity in the downtown area and the current design eliminates the need for low flow crossings and street closures.

42. Councilmember McCarthy asked about the maintenance of the culverts (seems to be a follow up from public participation.) Greg provided some response to the maintenance. Expectation is that a full response be placed on the stormwater website

Public Works anticipates traditional open channel maintenance to be performed. For the underground infrastructure, a maintenance plan will be developed that may include equipment needs and frequency of cleaning. Maintenance will also comply with the O & M manual to be provided by the US Army Corps of Engineers.